

of speed to wind the webs in overlapping relation around the rotatable members to move[, moving] the first and second panels at an increasing rate of speed from a closed position to an open position [during rotation of the rotatable members at a constant rate of speed in one direction], and [moving] rotating the rotatable members in a direction opposite the one direction at a constant rate of speed to unwind the webs from overlapping relationship around the rotatable members to move the first and second panels at a decreasing rate of speed from an open position to a closed position [during rotation of the rotatable members at a constant rate of speed in a direction opposite the one direction].

13. (Amended) A bi-fold door for an opening in a structure and apparatus for moving the bi-fold door between open and closed positions relative to the opening said door having a first panel, means for movably mounting the first panel on the structure, a second panel, means pivotally connecting the first panel to the second panel to allow the first and second panels to be moved from aligned positions closing the opening to side-by-side folded positions opening the opening, said door lift devices being operable to selectively open and close the bi-fold door, characterized by: a reversible electric motor connected to the door lift devices operable at a constant rate of speed for operating the door lift devices, said door lift devices having an elongated flat and flexible web having a first end and a second end, rotatable means attached to the first end of the web, said rotatable means including a shaft connected to the electric motor and a cylindrical means mounted on the shaft, said cylindrical means including a cylindrical member having opposite ends and annular plates located adjacent the opposite ends of the cylindrical member, said web having opposite side edges located in a contiguous relation relative to the annular plates, a cylindrical shield located around the cylindrical member and annular plates, said shield having a closed end slot aligned with the cylindrical member, said web extended through said slot whereby the annular plates and shield maintain the alignment of the

web with the cylindrical member, and means connecting the first end of the web to the [rotatable] cylindrical means whereby upon constant speed operation of the electric motor the shaft is rotated in one direction and the web continuously winds in overlapping relation around the cylindrical [means] member between the annular plates thereby moving the door at an increasing rate of speed from a closed position to an open position and upon reverse operation of the electric motor the shaft is rotated in a direction opposite the one direction and the web continuously unwinds from the cylindrical [means] member between the annular plates whereby the door moves at a decreasing rate of speed from the open position to the closed position, means mounting the rotatable means on one of the panels, and anchor means mounted on the other panel [connecting] connected to the second end of the web.

15. (Amended) The apparatus of Claim 13 wherein: the means connecting the first end of the web to the [rotatable] cylindrical means comprises [plates secured to the shaft, and] a rigid member extended between and mounted on said plates, said first end of the web having means located between said plates accommodating the rigid member whereby when said shaft is rotated by the [power means] electric motor the web winds on itself around the cylindrical [means] member to open the bi-fold door.

CT 18. (Amended) A method of opening and closing an opening in a structure with a bi-fold door having hinged panels, means movably mounting the door on the structure for movement between a down closed position to an up open position, and a door lift device having a rotatable member driven with a reversible electric motor [operable] to selectively move the door between the closed and open positions thereof comprising: connecting the rotatable member to one panel of the bi-fold door with an elongated flexible web [which winds in overlapping relation around the rotatable member], guiding the web with laterally spaced annular plates located adjacent the opposite ends of the rotatable member and a web accommodating slot in a

~~shield located around the rotatable member to maintain an overlapping relationship of the web around the rotatable member, rotating the rotatable member in one direction at a constant rate of speed to wind the web in overlapping relation around the rotatable member to move[, moving] the door at an increasing rate of speed from the closed position to the open position [during rotation of the rotatable member at a constant rate of speed and winding the web in overlapping relation around the rotatable member in one direction], and [moving] rotating the rotatable member in a direction opposite the one direction at a constant rate of speed to unwind the web from overlapping relationship around the rotatable member to move the door at a decreasing rate of speed from the open position to the closed position [during rotation of the rotatable member at a constant rate of speed and unwinding the web from overlapping relation around the rotatable member in a direction opposite the one direction].~~

19. (Amended) The method of Claim 18 including: operating [a] the reversible electric motor at a constant rate of speed to rotate the rotatable member at a constant rate of speed.

~~Cancel Claims 6 to 12, and 16 without prejudice.~~

REMARKS

Clean copies of amended Claims 1, 13, 15, 18 and 19 are enclosed.

Reconsideration of this application, as amended, is requested.

The prior art structures for opening and closing bi-fold doors in the past 60 years used electric motor driven winches accommodating cables for connecting the doors to the winches. Examples of these cable winches for opening and closing bi-fold doors are disclosed in the following patents:

U.S. Patent No. 2,274,276	<i>Sanders</i>	1942
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U.S. Patent No. 3,155,147	<i>Smith</i>	1964
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